

DOCKET NO: 248939US20

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
MARYELLEN L. GIGER, ET AL. : EXAMINER: WOLDEMARIAM, A. K.
SERIAL NO: 10/777,041 :
FILED: FEBRUARY 13, 2004 : GROUP ART UNIT: 2609
FOR: METHOD AND SYSTEM FOR :
FRACTAL-BASED ANALYSIS OF
MEDICAL IMAGE TEXTURE

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

I, Maryellen Giger, hereby declare:

I am a named inventor in the above-identified patent application SN 10/777,041 (the “present application”), and I am a named inventor in U.S. patent Publication Number 2002/0196966 A1 to Jiang et al. (hereinafter called Jiang).

In the outstanding Office Action dated July 23, 2007, the claims pending in the present application were rejected as anticipated by Jiang under 35 USC §102(b).

Concurrently submitted herewith is an amendment amending the rejected claims to define the present invention in Claim 1 as follows:

Claim 1: A method for a computerized analysis of a mammogram in digital form of a breast of a patient, comprising:
extracting from the mammogram at least one fractal-based feature associated with a texture of a parenchyma of the breast;
applying said at least one fractal-based feature to at least one of a linear discriminant classifier and an artificial neural network classifier; and

generating a risk marker indicative of a breast disease risk for said patient based on an output of at least one of a linear discriminant classifier and an artificial neural network classifier.

I conceived of several aspects of the present invention and that of Jiang, including the extracting of fractal-based features from digital images of human anatomy, the application of the extracted features to a classifier, such as a discriminant classifier or an artificial neural network, and the generation of a risk marker, based on the output of the classifier, indicative of risk of disease of a patient from which the image was obtained. To the extent that Jiang includes common disclosure of such features, the Jiang patent publication derived such common disclosure from me.

At the time of conception of the invention of the present application, I was under an obligation to assign to the University of Chicago, or its licensing designee (if applicable), which is the same owner of the Jiang patent application above identified.

I hereby declare that all statements made herein of my own knowledge are true and that all statements on information and belief are believed to be true; and further that these statement were made with knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both, under 18 USC §1001 and that such willful false statements may jeopardize the validity of any patent issuing from the present application.

Respectfully submitted,

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)

Signature: Maryellen Liger Date: 12/14/07
Maryellen L. Giger, Ph.D.
Professor of Radiology, the Committee on Medical
Physics, and the College Chair, Committee on Medical
Physics
Vice-Chair for Basic Science Research, Dept. of
Radiology
Section Chief, Radiological Sciences
Department of Radiology
University of Chicago
MC 2026
5841 S. Maryland Ave.
Chicago, IL 60637
U.S.A.